

## **REMARKS/ARGUMENTS**

Claims 1-25 remain in this application. Of these, claims 1-9 and 22-25 stand rejected. Claims 10-19 stand objected to as being dependent on other rejected claims, but are otherwise allowable. Claims 20 and 21 have been allowed.

Claims 1-3 have been amended and support for these amendments is found in the specification at paragraph [0023], as well as shown in FIGS. 1 and 3.

Claim 10 has been amended to overcome the Examiner's objection with regard to rewriting claim 10 in independent form. The amendment to claim 10 does not result in the addition of new matter.

### **1. Objection to Specification**

The Examiner has objected to paragraph [0002] of the specification and suggested that Applicants amend paragraph [0002] to reflect the patent numbers of the applications referenced by Applicants. Pursuant to the Examiner's suggestion, Applicants have amended paragraph [0002] of the specification to reflect that the referenced patent applications have issued, and have specifically included the patent numbers of the patent applications referenced.

### **2. Rejection of Claims 1, 2, 4, and 6-9 Under 35 U.S.C. 102(b)**

Claims 1, 2, 4, and 6-9 stand rejected under 35 U.S.C. 102(b) as being anticipated by Schmid et al. (U.S. Pat. No. 6,150,830; hereinafter referred to as "Schmid").

Schmid discloses a test head for making contact with test points arranged close to one another of an electric component. The test head has a

plurality of contact elements (25) which can be connected to a connecting element of a test device. The contact elements (25) are in respective feed-through openings through two or three overlying guide panels (17, 19, 21). The contact elements (25) are axially guidable through the feed-through openings (17, 19, 21) in the guide panels. See Abstract.

With regard to Applicants' claim 1, Applicants have amended claim 1 to clarify that the printed circuit board (PCB) has a plurality of holes which are *engaged* by the spring pins. The PCB (11) disclosed by Schmid clearly does not *engage* the contact elements (25). Schmid discloses contact elements (25) axially disposed within the three overlying guide panels (17, 19, 21), which are not PCBs, and which are comprised of "an electrically non-conductive material, for example a plastic, glass, ceramic, silicon, or the like." See col. 5, lines 29-32. Thus, Applicants' claim 1 is clearly distinguishable over Schmid because Schmid does not disclose a PCB having a plurality holes which are engaged by the spring pins. With regard to Applicants' claim 2, Schmid certainly does not disclose a PCB having a plurality of holes which *frictionally engage* the spring pins.

Schmid does not disclose all of the elements of Applicants' amended claim 1. Thus claim 1 is believed to be allowable over the teachings of Schmid for at least the above reasons. Claims 2, 4, and 6-9 are believed to be allowable at least for the reason that they depend from an allowable claim 1.

### 3. Rejection of Claims 22-25 Under 35 U.S.C. 102(b)

Claims 22-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Murphy (U.S. Pat. No. 5,157,325; hereinafter referred to as "Murphy").

Murphy discloses a wireless test system for simultaneously performing electrical tests on the opposite sides of a printed circuit board. Double-ended pogo pins are utilized to electrically interconnect the top and bottom sides of the board under test to the top and bottom printed circuit interface boards, positioned above and below the

board being tested, which are electrically interconnected by a flexible printed circuit ribbon. See Abstract.

Applicants' claim 22 recites, in part, "... moving the test probe over the target board to seat an alignment mechanism of the test probe to a corresponding alignment mechanism of the target board. . ." Murphy does not seat an alignment mechanism of the test probe to a corresponding alignment mechanism of the target board. Instead, Murphy seats an alignment mechanism of an upper PCB (26) to a corresponding alignment mechanism of an upper push-down plate (34). It is important to note that the target board in Murphy is board (14) and not the upper PCB (26) or its corresponding push-down plate (34). Murphy states that, "[t]he upper printed circuit interface board 26 is secured to the top side of a push-down plate 34, as by screws 36, and the bottom side of the upper interface board 26 has formed thereon a spaced series of test contact points 38 which are horizontally aligned with the upper side test contact points 16 on the printed circuit board 14." See Col. 6, lines 23-29.

The Examiner seems to misconstrue the placement of Murphy's alignment screws (36). The alignment screws (36) align the upper PCB (26) with the upper push-down plate (34). The alignment screws (36) disclosed by Murphy do not align the test probe to the target board (14), as disclosed by Applicants' claim 22. Thus, Applicants' claim 22 step of "... moving the test probe over the target board to seat an alignment mechanism of the test probe to a corresponding alignment mechanism of the target board. . ." is not disclosed by Murphy.

Murphy does not disclose all of the elements of Applicants' claim 22. Thus claim 22 is believed to be allowable over the teachings of Murphy for at least the above reasons. Claims 23-25 are believed to be allowable at least for the reason that they depend from an allowable claim 22.

#### 4. Rejection of Claims 3 and 5 Under 35 U.S.C. 103(a)

Claims 3 and 5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid et al. (U.S. Pat. No. 6,150,830; hereinafter referred to as "Schmid") in view of Holcombe et al. (U.S. Pat. No. 6,867,609; hereinafter referred to as "Holcombe").

With regard to Applicants' claim 3, Applicants incorporate the above arguments with respect to claim 1 and Schmid, *supra*. Applicants have amended claim 1, and thus dependent claim 3, to clarify that the printed circuit board (PCB) has a plurality of holes which are *engaged* by the spring pins. Because Schmid does not even disclose the PCB having a plurality of holes engaged by the spring pins, Schmid certainly does not disclose inserting and soldering the spring pins into plated holes in the PCB. Thus, Applicants' claim 3 is believed to be allowable at least for the above reasons and because it depends from an allowable claim 1.

With regard to the Holcombe reference, the Examiner erroneously asserts that Holcombe teaches spring pins (230) inserted into and soldered into plated holes (referencing col. 3, lines 19-62) of PCB (210). Holcombe actually discloses spring pins (230) having *one side* soldered to PCB (210), as clearly shown in FIGS. 3A and 3B. Holcombe does *not* disclose a PCB having a plurality of holes which are engaged by the spring pins.

Applicants believe claims 3 and 5 are allowable at least for the reason that they depend from an allowable claim 1, and because Holcombe fails to disclose the limitations of parent claim 1 (see previous argument, *supra*).

#### 5. Allowable claims

Claims 10-19 have been objected to as being dependent upon a rejected base claim which, the Examiner has indicated, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have amended claim 10 by rewriting claim 10 in


independent form, as suggested by the Examiner. Applicants believe claim 10 is now in condition for allowance. Since claims 11-19 depend from claim 10, Applicants believe they are also in condition for allowance because they depend from an allowable claim 10.

## 6 . Conclusion

In light of the above Remarks, Applicants respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,  
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By: \_\_\_\_\_

  
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